

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An optical transmission system, comprising an optical communication apparatus, a communicating party of said optical communication apparatus, and a monitor device for performing monitoring of optical signals transmitted and received between said optical communication apparatus and said communicating party;

wherein said optical communication apparatus comprises:

an optical branching transmitting device having a single input and a first and second outputs, for branching input optical signals to be transmitted to said communicating party from the single input into first optical signals on the first output and second optical signals on the second output;

a first transmit interface coupled to receive said first optical signals from said optical branching transmitting device, said first transmit interface connected ~~to~~ only to a single optical cable for transmitting said first optical signals to said communicating party;

a second transmit interface coupled to receive said second optical signals from said optical branching transmitting device and for transmitting said second optical signals to said monitor device;

a receive interface coupled to receive optical signals from said communicating party and providing received optical signals;

an optical branching receiving device having a single input and a first and second outputs, wherein said single input is connected to said receive interface for receiving said received optical signals and for branching said received optical signals into third and fourth optical signals respectively on the first and second outputs;

additional circuitry of said optical communicating apparatus connected to receive said third optical signals from said optical branching receiving device;

a third transmit interface connected to receive said fourth optical signals from said optical branching receiving device and for transmitting said fourth optical signals to said monitor device;

wherein said monitor device includes a display and performs monitoring of data contents of said second and fourth optical signals.

2. (Currently Amended) The optical transmission system according to claim 1, wherein said monitor device comprises two mutually independent monitors each having a display unit: a monitor for performing monitoring of the data contents of said second optical signals and a monitor for performing monitoring of the data contents of said fourth optical signals.

3. (Previously Presented) The optical transmission system as recited in claim 1, wherein said additional circuitry of said optical communication apparatus is located remotely of said optical branching transmitting device, said optical branching receiving device, said first, second and third transmit interface and said receive interface.

4. (Cancelled)

5. (Original) The optical transmission system according to claim 1, wherein said data contents are signaling information necessary for data exchange.

6. (Currently Amended) A monitoring method for an optical transmission system comprising an optical communication apparatus, a communicating party of said optical communication apparatus, and an external monitor device for performing monitoring of optical signals transmitted and received between said optical communication apparatus and said communicating party, comprising:

in said optical communication apparatus, a transmitting optical branching step of branching a single output of optical signals to be transmitted to said communicating party into first and second optical signals;

a first interface transmitting step of transmitting said first optical signals received as a result of said transmitting branching step to said communicating party along only a single optical cable;

a second interface transmitting step of transmitting said second optical signals received from said first transmitting branching step to said monitor device;

an interface receiving step of receiving optical signals from said communication party;

a receiving optical branching step of branching a single input of optical signals received from said interface receiving step into third and fourth optical signals;

an additional receiving step of receiving said third optical signals into additional circuitry of said optical communication apparatus;

a third interface transmitting step of transmitting said fourth optical signal to said monitor device; and

in said monitor device, a monitoring step of performing monitoring of the data contents of said second and fourth optical signals and displaying the data contents on a display.

7. (Previously Presented) The monitoring method as recited in claim 6, wherein said first interface transmitting step, said second interface transmitting step, said interface receiving step, said receiving optical branching step and said third interface transmitting step are performed in an optical external conducting apparatus remote from remaining parts of said optical communication apparatus.

8. (Original) The monitoring method according to claim 6, wherein said data contents are signaling information necessary for data exchange.

9.-14. (Cancelled)